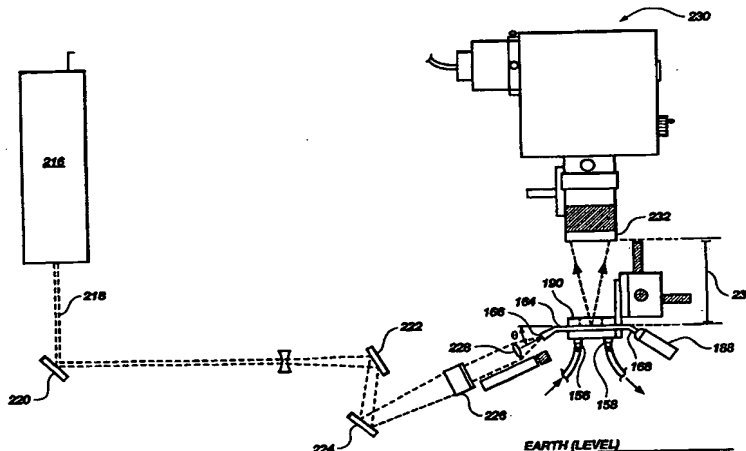




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(54) Title: LENS AND ASSOCIATABLE FLOW CELL**(57) Abstract**

Improvements in a biosensor of the type having reservoirs or wells for analyzing a biological liquid are disclosed. A biosensor (190) includes a waveguide (164) placed between a plurality of members such as plates (100, 186), at least one of the members (100) being formed to define the walls (132, 134, 136) of the reservoirs where the liquid is biologically analyzed. The walls of the reservoirs are made of an inert, opaque material such as a metal. Although the biosensor may include a gasket (162), the gasket is associated with the members and waveguide in such a way (e.g. by recessing the gasket into a channel formed into a metal plate) so that the gasket does not form any significant portion of the reservoir wall. Waveguides of varying composition (e.g. plastic, quartz or glass) may be associated with the members to form the biosensor. The metal plate of the biosensor has input and output ports for infusing, draining, or oscillating the liquid to be analyzed in the reaction reservoir. Also disclosed is a sled-shaped waveguide associated with a rear lens to couple light out of the waveguide to serve as a quality control measure thus insuring that the biosensor is properly placed and that the light is working.

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